

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A composition useful for specifically killing microbial organisms, said composition comprising:  
a targeting moiety comprising the amino acid sequence K-K-H-R-K-H-R-K-H-R-K-H (SEQ ID NO:61) attached to an antimicrobial peptide moiety, where said targeting moiety binds to a target microbial organism and whereby said composition has an antimicrobial effect on said target microbial organism, and an anti-microbial peptide moiety, wherein the targeting moiety is fused in-frame with the anti-microbial peptide moiety and specifically recognizes a target microbial organism and wherein the composition has an anti-microbial effect on the target microbial organism.

2-12. (Cancelled).

13. (Currently amended) The composition of claim 101, wherein the targeting moiety is fused in-frame with the C terminus of the said anti-microbial peptide moiety.

14. (Currently amended) The composition of claim 1, wherein said antimicrobial the targeting moiety is a peptide having an amino acid sequence as shown in SEQ ID NO. 61 and the anti-microbial-peptide moiety is novispirin G10 having an amino acid sequence as shown in SEQ ID NO:16,SEQ ID NO. 16.

15. (Previously presented) The composition of claim 14, wherein the targeting moiety is fused in-frame with the C terminus of novispirin G10.

16. (Currently amended) The composition of claims 1 or 14, wherein the targeting moiety and the anti-microbial peptide moiety are fused via a peptide linker to form a fusion peptide.

17. (Currently amended) The composition of claim 16, wherein the fusion peptide comprises an amino acid sequence as shown in SEQ ID NO:71,SEQ ID NO. 71.

18. (Cancelled).

19. (Original) The composition of claim 1, wherein the anti-microbial peptide moiety comprises a peptide selected from the group consisting of alexomycin, andropin, apidaecin, bacteriocin,  $\beta$ -pleated sheet bacteriocin, bactenecin, buforin, cathelicidin,  $\alpha$ -helical clavanin, cecropin, dodecapeptide, defensin,  $\beta$ -defensin,  $\alpha$ -defensin, gaegurin, histatin, indolicidin, magainin, nisin, protegrin, ranalexin, and tachyplesin.

20. (Original) The composition of claim 1, wherein the anti-microbial peptide moiety comprises a peptide selected from the group consisting of histatin 5, dhvarl, protegrin PG-1, and novispirin G10.

21-23. (Canceled).

24. (Currently amended) The composition of claim 1, wherein the target microbial organism is a member of the genus *Pseudomonas*.

25. (Original) The composition of claim 24, wherein the anti-microbial peptide moiety comprises a peptide selected from the group consisting of buforin, cecropin, indolicidin, and nisin.

26. (Currently amended) The composition of claim 24, wherein the target microbial organism *Pseudomona* is *Pseudomonas aeruginosa*.

27. (Original) The composition of claim 26, wherein the anti-microbial peptide moiety comprises a peptide selected from the group consisting of magainin and renalexin.

28-47. (Canceled).

48. (Currently amended) The composition of claim 21, wherein the targeting moiety is fused in-frame with the anti-microbial peptide moiety through the N-terminus of the targeting moiety.

49. (Canceled).

50. (Currently amended) The composition of claim 416, wherein the peptide linker is from about 10 to 60 amino acids.

51. (Currently amended) The composition of claim 50, wherein the peptide linker is from about 15 to 25 amino acids.

52. (Currently amended) The composition of claim 51, wherein the peptide linker is about 15 amino acids.

53. (Canceled).

54. (Currently amended) The composition of claim 16, wherein the fusion peptide comprises an amino acid as shown in SEQ ID NO:70,SEQ ID NO. 70.